

LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

January - February 1995 Vol. 5, No. 1

In This Issue

Steven Glenn has written about the New York Metropolitan Flora project at Brooklyn Botanic Garden. If anyone is interested in helping please contact him.

Eric Lamont has written about an interesting *Trillium* found on Long Island.

The second installment of **Louise Harrison's** article on the New York Biodiversity Act is included. Incidentally \$10 million dollars from this act has been put towards protecting the Long Island Pine Barrens.

Correction: Last issue I indicated that **Donald House** was putting together an exhibit for Briarwood Public Library. This should read BRENTWOOD PUBLIC LIBRARY. The exhibit is scheduled to open in April and Donald would like any ideas or suggestions as well as contributions of photos, specimens, maps, etc. He can be reached at 516-273-4047.

PROGRAMS

10 January 1995 - 7:30 pm*, **Members night**, Come and share a few of your favorite slides; call **Steven Clemants** (718/941-4044) if you plan to show slides. Muttontown Preserve Nature Center, East Norwich. (For directions to Muttontown Preserve call 516/571-8500).

14 February 1995 - 7:30 pm*, **Prof. Ray Welsh**, "The Forest and The Trees: Unravelling the Past of our Local Vegetation or From the Pleistocene to the Present in Under an Hour." Museum of Long Island Natural Sciences, SUNY at Stony Brook. (For directions for MOLINS call 516/632-8230).

* Refreshments are available starting at 7:30 pm; the meeting begins at 8 pm.

The New York Metropolitan Flora Project

Beginning in 1990, the Brooklyn Botanic Garden (BBG) undertook the Flora of Metropolitan New York (NYMF) project. This is a reexamination of the flora contained in all counties within a 50 mile radius of NY City, with the first 3 years being devoted to woody species. This area includes all of Long Island (see Figure 1). The NYMF study area has been partitioned into over 1,000 5k x 5k blocks to facilitate systematic exploration.

BBG staff are visiting blocks in order to collect voucher specimens for our herbarium (and eventual distribution of said specimens to NJ, NY, and CT herbaria) and to make a written record of what woody species were observed. As of the end of the 1994, BBG staff had explored 47 sites within 25 blocks. We also decided to seek volunteer help to visit some blocks and note species occurrence.

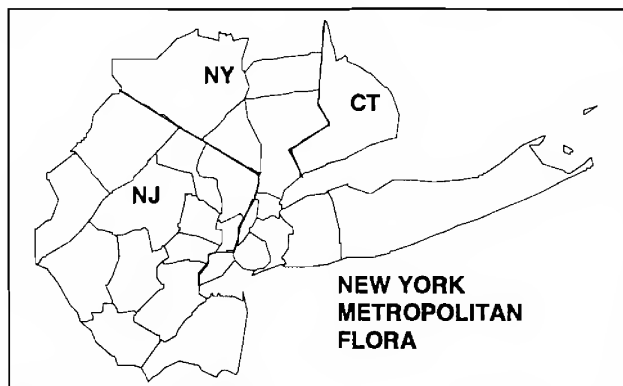


Fig. 1.

All field information will be entered into a FoxPro® database. We are also seeking and entering into the database older documentation regarding local flora such as research papers, state and local herbaria specimens, park inventories, environmental impact statements, botanical club field trip reports, etc. In addition, if any unpublished plant inventory lists from

parks, preserves, field trips, etc. exist, we would welcome these as well. The complete database will then be transferred to a MapInfo® mapping program. This 5 km² based database/map will allow the creation of

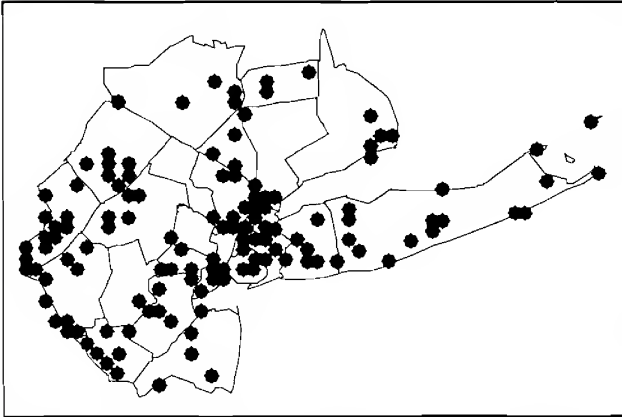


Fig. 2 *Vitis labrusca* L. - FOX GRAPE
Current and Historical Distribution (Preliminary)

distribution maps for each species in far greater detail (compared to present county distribution maps), show current and historical distributions, and highlight the decline of native species and expansion of alien species (see Figures 2 & 3).

We anticipate adding additional 'layers' of digitized map data to the species distribution maps such as soil, bedrock, climatic, etc. Hopefully this will provide further insight into factors determining species distribution and highlight areas favorable for species acquisition or reintroduction. We envision a series of NYMF publications including a detailed atlas of plant distributions, and a woody plant manual. BBG also wishes to make the information available to the public via the Internet or CD-ROMs.

The magnitude of this project means that we need volunteer help. We have received assistance from members of the Long Island Botanical Society, The Torrey Botanical Club, the New Jersey Native Plant Society and various institutional professionals. To date, volunteers have undertaken to investigate 68 blocks.

The Brooklyn Botanic Garden NYMF staff hereby make an appeal to all plant-people, Long Island Botanical Society members and otherwise, who would like to help in field research for the NYMF project. Again, we will be dealing with only woody species for the summers of '95 and '96. Don't feel that you have to be intimate with every woody species to participate. We are basically seeking people to explore a minimum of 3 areas of their choice within a 5 km² block and note on a provided checklist what they observe.

Simply contact me (Steven Glenn, 1000 Washington Ave, Brooklyn, NY 11225, 718-941-4044 ext. 241), and explain what area you wish to survey. You can state a

specific area such as a town or state park, or a general area such as "eastern Suffolk County", and a block will be selected for you. Persons may choose as many blocks as they wish. Participants will receive a volunteer packet containing maps of their block(s), instructions, a preliminary atlas showing county distributions of woody species, and a checklist.

To all NYMF participants- thank you and "good hunting!"--Steven Glenn

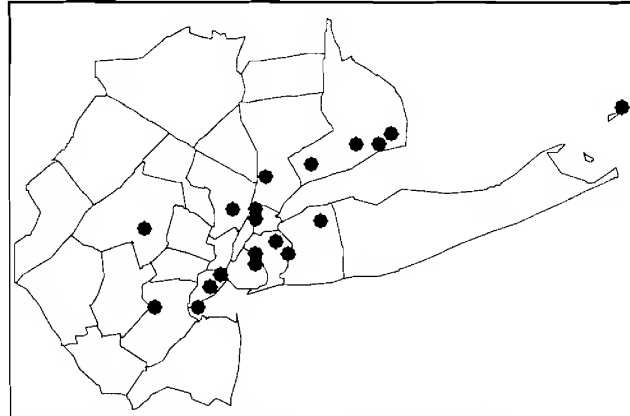
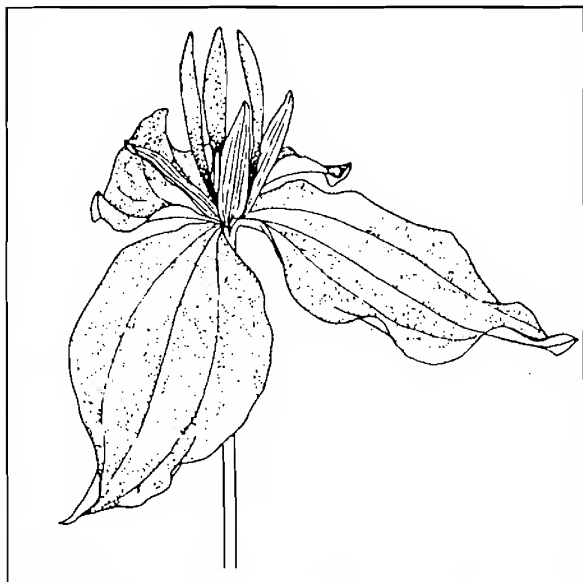


Fig. 3. *Ampelopsis brevipedunculata* (Maxim.) Trautv. -
PORCELAIN-BERRY
Current and Historical Distribution (Preliminary)

An unusual Trillium from Long Island, New York.

During the spring of 1991, LIBS member **Arthur Skopec** was birding and botanizing in the rich woodlands north of Oakland Lake in Queens Co. The forest is dominated by red oak (*Quercus rubra*), mockernut hickory (*Carya tomentosa*), American beech (*Fagus grandifolia*), and sweet birch (*Betula lenta*). A few large hemlocks (*Tsuga canadensis*) also occur in the area, but they probably will not live for many years. Flowering dogwood (*Cornus florida*) and musclewood (*Carpinus caroliniana*) occur in the understory. Wildflowers still precariously survive in this part of New York City; noteworthy species include cut-leaf toothwort (*Cardamine concatenata*, also known as *Dentaria lacineata*), spring beauty (*Claytonia virginica*), trout lily (*Erythronium americanum*), wild geranium (*Geranium maculatum*), and common violet (*Viola sororia*).

At the top of a hill overlooking the lake, Art discovered a wildflower he had never seed before: a trillium with maroon, stalkless flowers and dramatically mottled leaves. He identified the trillium with Peterson's Guide to Wildflowers as *Trillium sessile*. At the time Art did not realize that *T. sessile* was listed as "critically imperiled in New York State because of extreme rarity," by the New York Natural Heritage Program (NYNHP).



Trillium cuneatum

News of Art's discovery eventually gained the attention of local and state botanists. In 1993, **Steven Young** of NYNHP asked me about the report of *Trillium sessile* from Queens Co.; I knew nothing about it. In spring of 1994, LIBS member **Sherman Wolfson** contacted me about the trillium report, he had extensively photographed the plant and was very concerned about protecting the two flowering individuals. The next day Steve Young phoned me again and asked if I could verify the trillium report. So I contacted Art Skopce and we met at Oakland Lake.

The trilliums were growing along the edge of a well traveled path, not far from 46th Ave. I knelt down, admired their beauty, and began to identify them. The stalkless, or sessile-flowered trilliums are a taxonomically difficult group and I quickly realized that different plant manuals presented conflicting diagnostic characters for the same species. For example, Britton and Brown's Illustrated Flora (1952) stated that *Trillium sessile* had non-mottled leaves, whereas Gray's Manual of Botany (8th edition) described the leaves as "often mottled." To further complicate matters, there are several species of trillium with maroon, stalkless flowers. Correct identification required the use of relatively technical characters. An important diagnostic

character is the morphology of the male reproductive structure, the stamen. In *Trillium sessile* the anthers are prominently prolonged into a beak; the anthers of the plants at Oakland Lake did not appear to be prolonged into a beak. After fussing with several keys I identified the plants as *Trillium cuneatum*; but I wasn't totally convinced that this determination was correct because of some contradictions in Gray's Manual, and also Britton and Brown did not even list *Trillium cuneatum* as a valid species. According to Britton and Brown the trillium keyed out to either *T. viride* or *T. hugeri*.

Although I felt fairly confident that the plants were *Trillium cuneatum* I decided to have the determination confirmed by **Tom Patrick**, a trillium expert from Georgia. I carefully removed one stamen from a flower and left the site. A few yards down the path I noticed three plants of may-apple (*Podophyllum peltatum*). The plants were somewhat scraggly in habit and appeared out of place. Usually may-apple forms dense colonies of robust individuals. That evening I phoned Sherman Wolfson and asked if I could send Tom Patrick some of his photographs of the trillium to aid in identification. Sherman sent fantastic prints depicting every angle of the plants.

Several weeks later I received a reply from Tom Patrick, excerpts from his letter follow: "Many thanks for the excellent material on trillium - excellent because you remembered to include information on the stamens and an actual 'specimen.' The color photos are fairly representative of *Trillium cuneatum*, but the stamen has to be from that species! *Trillium cuneatum* is highly unlikely as a native plant anywhere in New York State, I suspect that the trilliums in question were planted by humans. We know well that *T. cuneatum* is the most widespread of the southern trilliums, and the most widely cultivated sessile-flowered species due to this fact alone. I suspect several wildflower enthusiasts are growing it in the New York City area and well up into New England and southern Canada. It is showier than *T. sessile* because of its larger flowers and tendency for more dramatic mottling in its leaves. Someday soon (within the next 10 years) we will be able to genetically test the theory of plant introduction by looking at DNA or proteins and comparing populations."

The natural range of *Trillium cuneatum* is from central North Carolina and southern Kentucky to Georgia and Mississippi. *Trillium sessile* is at the northeastern limit of its range in western New York, where it is reported from Chautauqua and Monroe counties.--**Eric Lamont**

New York's Biodiversity Act Cont'd

Old and New Roles

The legislation formally established important programs that were set up administratively years ago, such as the NY Natural Heritage Program and the (much older) NYS Biological Survey. Further, it defined roles for the organizations participating in the BRI:

NYS Biological Survey (within State Museum) -

Inventory, research, analyze, and disseminate information about plants and animals that live in the state. Conduct research, publish results, and collect specimens and artifacts to aid government, industry, and educational institutions.

NYS Dept. of Environmental Conservation

(DEC) - Conduct review of state lands and waters to identify those that harbor plants, animals, and ecological communities that are rare in New York. Participate in the New York Natural Heritage Program. Prepare written stewardship plans for lands in state preserve.

NY Natural Heritage Program (within DEC) -

Identify location and status of plant and animal species and ecological communities. Develop systems for ranking the state and global rarity of plant and animal species and ecological communities. Maintain comprehensive data management systems integrating information on the location and status of rare plants, animals, and ecological communities; analyze and interpret such information toward conservation and management of New York's biological diversity.

NY Office of Parks, Recreation and Historic

Preservation (OPRHP) - In consultation with the BRI, conduct review of state lands under OPRHP jurisdiction to identify lands and waters that harbor plants, animals, and ecological communities that are rare in the state, and protect, manage, and conserve same. Designate a system of park preserves and park preservation areas and manage same to protect biological diversity. Develop written stewardship plans for such areas.

State Preserves

The Biodiversity Act elaborates on the definition of New York State's "Preserve," under the environmental conservation law, stating it "shall include only those lands in state ownership in need of the highest level of protection..." and is "intended for unique and irreplaceable state-owned lands that are relatively undisturbed and not presently being actively managed through modern forest management practices." The BRI is responsible for assisting the DEC and OPRHP in conducting an inventory of state-owned lands and

identifying those that harbor plants, animals, and ecological communities that are rare in the state, and recommend to the governor and the legislature appropriate actions for management and conservation. Lands dedicated to the preserve are to be held for one or more of the following purposes:

a) As natural areas for maintaining plants, animals, and natural communities;

b) As reservoirs of natural materials and ecological processes that contribute to the state's biological diversity;

c) As field laboratories for scientific research and education in natural sciences; and

d) As places of natural and historical interest and beauty which provide passive recreational and commercial fishing opportunities that are compatible with the protection of the features of the area.

Further, the parks, recreation, and historic preservation law was amended to provide for a system of state Park Preserves and **Park Preservation Areas**. Park preservation areas will be portions of facilities under OPRHP that are not park preserves, including state parks, parkways, historic sites, and recreational facilities, yet which possess "outstanding ecological values." Lands dedicated as park preserves or park preservation areas are to be maintained or restored to protect biological diversity and staffed by professionals who would manage the areas' "educational and scientific utilization." Each park preserve and park preservation area is to have a written stewardship plan.

BRI Funding

The Biodiversity Act amended the state finance law to establish a biodiversity stewardship and research fund, which will be available the DEC, OPRHP, and the State Museum (including the new BRI). Following appropriations from the legislature, these funds will be used for carrying out each programs responsibilities under the new legislation. The fund can accept public and private funding for identifying and managing biodiversity.

The creative and collaborative efforts of The Nature Conservancy, the State Museum, and the Legislature brought us an exciting opportunity to combine institutional resources to protect our natural resources. The new formalized partnerships are designed to make efficient use of the best each agency has to offer. The relationships established in the act show recognition of the need for all concerned with protecting biodiversity to work cooperatively toward our goals, forging the links between research, stewardship, education, and public policy that intuitively make sense yet often do not exist.--Louise Harrison

Society News

Executive Board Meeting

November meeting

Skip Blanchard reported that the Flora Committee is working on maps of LI gymnosperms. If anyone has info they wish to pass on contact Skip.

Al Lindberg reported that the Great Trees of Long Island booklet is available from Planting Fields Arboretum for \$6.

Steve Clemants gave a talk to the New Jersey Native Plant Society. Many of the members he talked to were members of LIBS and very pleased with the LIBS newsletter.

Bob Laskowski found *Galinsoqa quadriradiata* (*G. ciliata*) and *Cycloloma atriplicifolium* at the west end of Jones Beach. **Skip Blanchard** found *Lechea tenuifolia* in Rocky Point Preserve and something that looked like *Aster vimineus* and *Desmodium ciliare* at Muttontown. **Al & Lois Lindberg** found *Desmodium nudiflorum* and *D. glutinosum* at Tiffany Creek west.

Al Lindberg then gave a talk on the efforts to restore habitat for Tiger Salamanders at Muttontown. He brought in living salamanders for everyone to pet (ich!). The efforts to restore their wetlands is still going on.

December meeting

Several people expressed interest in a winter field trip. If anyone is interested in leading such trips in the future please contact the field trip chairs.

Steven Englebright (New York State Assembly member from Suffolk County and Director of the Museum Of Long Island Natural Sciences) gave a very informative talk on the history of pine barrens protection efforts. He talked about the Pine Barrens Protection Act and the earlier and more important Pine Barrens Maritime Reserve Act. There were many questions and some discussion of how to make sure these acts are implemented.

New York State Biodiversity Act

LIBS members wishing to obtain a copy of the NYS Biodiversity Act (mentioned in the article by Louise Harrison) are encouraged to contact their assembly members or state senators. The assembly bill number is A. 5235--B; the senate bill number is S. 5072--B. They were signed into law as Chapter 554 of the Laws of 1993.

Margaret Conover wished to resign as co-chair of the Education Committee. **Tom Stock** will serve the remaining year of her term. **Glenn Richard** requested a co-chairperson for the remaining year of his term. **Al Lindberg** agreed to serve as co-chair.

The board agreed to buy pizza for the **Riverhead HS** students who process the newsletter and to pay for text entry for the newsletter.

We now have 220+ members.

The board agreed to look into newsletter exchanges with other organizations.

Sales of T-shirts and sweatshirts have now covered expenses and we now have a small profit.

Approval for installation of the Beitel Memorial Plaque should be forthcoming.

All members thought that the spring barbecue was a success and that we should repeat the event perhaps at Caumsett or Connetquot.

Several other topics were discussed. If you wish to receive minutes please contact **Jane Blanchard**, Corresponding Secretary.

Treasurers Report 1994

Opening Balance (Jan. 1, 1994)	\$3,838.92
Income total	2,421.71
Expenses total	1,460.24
Net Gain	961.47
Liabilities (outstanding bills)	- 0 -
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Ending Balance (Dec. 1, 1994)	\$4,800.39

Going Native

Brooklyn Botanic Garden has just published a new handbook called GOING NATIVE: BIODIVERSITY IN OUR OWN BACKYARDS. This handbook has chapters by natural landscapers on creating a biodiverse garden. Included is a chapter entitled "Biodiversity in the Pine Barrens" written by **Karen Blumer**, a LIBS member. She writes about a low maintenance natural landscape created in Southampton. Copies can be purchased at bookstores, garden centers and nurseries or by mail for \$6.95 + \$3.75 for postage and handling from Brooklyn Botanic Garden, 1000 Washington Ave., Brooklyn, NY 11225.

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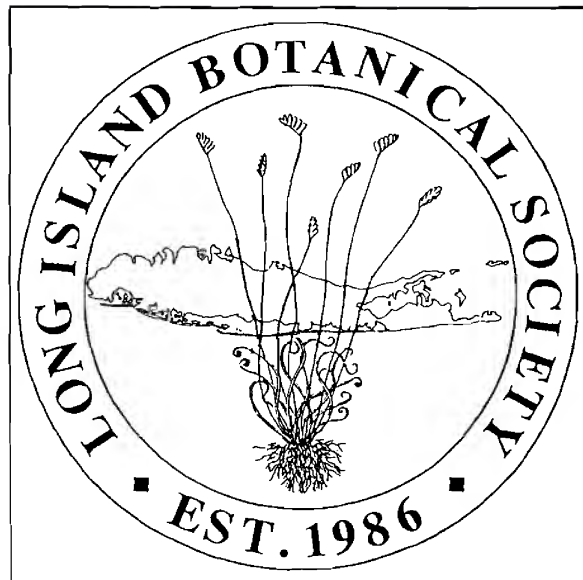
Founded: 1986; Incorporated: 1989.

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Steven Clemants
Treasurer	Carol Johnston
Rec'd Sec'y	Barbara Conolly
Cor'sp Sec'y	Jane Blanchard
Local Flora	Skip Blanchard
Field Trip	Glenn Richard
	Allan Lindberg
Membership	Lois Lindberg
Conservation	Louise Harrison
	John Turner
Education	Mary Laura Lamont . . .
	Tom Stock
Hospitality	Nancy Smith
	Betty Lotowycz
Program	Eric Lamont
Editor	Steven Clemants

Membership

Membership is open to all, and we welcome new members. Annual dues are \$10. For membership, make your check payable to LONG ISLAND BOTANICAL SOCIETY and mail to: Lois Lindberg, Membership Chairperson, 45 Sandy Hill Rd., Oyster Bay, NY 11771-3111



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